



Accelerate People

**Data Technician
Assessment Method 1
Sample Exercise**

Document History

To ensure quality control and to quickly identify any changes made version control must be listed below. Including, the latest version number, date of the amendment and changes made.

Version Number and Date	Changes Made
V1.0 February 2022	2022 Document created.
V1.1 February 2022	Additional supporting guidance added 2 nd paragraph on page 2
V1.2 March 2022	Minor formatting and grammar changes

Guidance

The purpose of this document is to provide you with an opportunity to practice some key Data Technician techniques, this sample practice project provides you with an opportunity to demonstrate your own knowledge and skills and your approach to working with data.

This project has been designed to enable you to practice some of the skills required in both the “**Data Gathering**” and “**Data Analysis and Validation**” Scenario Demonstrations and **not** as a timebound mock or practice test.

- **This is a practice sample project and will not contribute to your overall grade and will not be assessed.**
- **You may wish to discuss the different techniques you could use with either your training provider or a work colleague and seek access to additional support and materials.**
- **You can choose how much of this sample project you complete and may attempt the project multiple times.**

During your End-point Assessment

- **You will be assessed via observation and you will be asked some questions during the scenario demonstration, the questions asked and your response form part of the assessment.**
- **You will be expected to work independently in an environment that is a quiet space, free of distractions and influence.**
- **You may ask questions regarding the project scenario description for the purpose of clarification.**
- **The independent assessor cannot give you additional guidance on how to interpret or execute the tasks required in the project.**
- **Your Scenario Demonstration will be split into two 45 min exercises each with up to 30 mins of practical activity and a minimum of 15 mins for each session set aside for questions.**

Using the Data

In addition to the sample task included in this document, you can work with your training provider to utilise the data to enable you to;

- Access, format, collate, blend and extract data from multiple identified sources in line with current industry standards.
- Locates and migrate data from the already identified sources.
- Manipulates and links different data sets using tools and techniques to identify trends and patterns.
- Present data in a format appropriate to the task.
- Summarises and explains the results of the gathered data.
- Identifies trends and patterns in data.
- Apply algorithms and basic statistical methods to identify trends in data to audit results.
- Cross check and filter data to identify faults.
- Clean, test and assesses the confidence and integrity of the data.
- Identify opportunities to use automation.

Equipment Required

Use of a computer with access to the internet, email and any software tools appropriate to the task. You can use the tools or software that you are most familiar and comfortable with to complete this task.

Sample Project Scenario

Pantheon Powers Pictures Ltd (PPP Ltd) are thinking about a creating a new superhero film franchise to pitch to major film studios. PPP Ltd are interested in launching this new film franchise, but before they create an investor pitch, they want to better understand some of the key characters.

Your manager wants to give you the opportunity to practice working on this task and has asked you to work on the data to enable the business to better understand different superheroes.

To complete the **Sample Exercise**, your manager has left you with a list of instructions to enable you to complete the task and access to the following data:

Data Source 1 "SH1.csv"

Data Source 2 "SH2.csv"

Sample Exercise Instructions

1. Locate and download the data sets you have been given access to.
2. Open the data sets and review the structure of the data.
3. From Data Source 1 ("SH1") copy all the data and paste into a new document.
4. Save this file to create an appropriately named separate file or data source
5. Combine and merge your new data set created in step 4, with Data Source 2 ("SH2")
6. Create a single data source that shows all of the data in a single information source / file / folder or location, ensure that you can access the data with the data tools that you intend to use.
7. Save and create appropriately named separate version file or data source
8. Please make sure all numerical data contains one decimal point
9. Please make sure all negative height data has the generic value of 165
10. Save the file in a format that can be used for future analysis for example "xlsx"
11. Check for missing values in your gender data, if found use text "Unknown" to populate
12. Check for missing or minus values in your weight data, replace all missing or minus weight values with the value of 70.
13. In the new file created in Step 10, create a new data field to show height "Height in Feet" and create a suitable calculation dividing the current height value by 30.48.
14. Create a new data field to show the weight "Pounds" and create a new calculation using by multiplying the current weight value by 2.205.
15. Structure the data to enable a filter to be applied to the "Publisher."
16. Cross check and filter data to identify faults.

17. Fix and correct any data, for missing data replace it with "Unknown."
18. Extract all data linked to DC Comics and create a new data source.
19. Create a scatter plot showing the combined height (ft) and weight (lbs) of DC comics characters on a chart.
20. Ensure the weight is shown on the x-axis and height on the y-axis.
21. Ensure the chart axis are both labeled and set the starting point of the y-axis as 2.
22. Please show bad characters as coloured red and good characters coloured green.
23. Remove the good characters from the chart.
24. Add text labels showing only the bad character's name in the chart.
25. Save the file in a format that can be used for future analysis.

If you have any questions or feedback, please email info@accelerate-people.co.uk

If you need any further information, please visit the Accelerate People Website
<https://www.accelerate-people.co.uk/>